

INTERAGENCY AGREEMENT
BETWEEN THE
JOHNSON SPACE CENTER,
NATIONAL AERONAUTICS AND SPACE ADMINISTRATION
AND THE
U.S. ARMY CORPS OF ENGINEERS

ARTICLE I -- PURPOSE

The purpose of this agreement between the U.S. Army Corps of Engineers (USACE) and the Johnson Space Center (JSC), National Aeronautics and Space Administration, is to define the research and development areas of mutual interest, and to provide opportunity for cooperative programs in space exploration to include establishment of permanent lunar bases, and eventual flights to Mars. This agreement is authorized by Section 601 of the Economy Act of June 30, 1983, as amended (31 USC 1535), and Section 203(C)(5) and (6) of the National Aeronautics and Space Act of 1958, as amended (42 USC 2473).

The Agreement will insure full and effective use of the capabilities and expertise of USACE and JSC to identify, plan, execute, and monitor space program elements involving closed environmental living systems including low g and zero g sewer systems and waste disposal; structural concepts and materials; geotechnical considerations, soil mechanics and foundation designs; material and earth handling in low and zero g; site selection including surveying; construction techniques including robotics, power, and power distribution; and environmental issues (i.e., facilities on the environment and vice-versa, including dust control); and buried and air-inflated structures for lunar construction. The cooperation between the agencies is agreed to include mutual consultation, mutual development of research and development programs, and performance of specific research and development tasks in the indicated areas of science and technology.

ARTICLE II -- PROGRAM COORDINATION

USACE and JSC shall implement a regularly scheduled exchange of planning and development information related to areas of USACE involvement in space exploration and utilization. These exchanges can be in terms of written or verbal communications, mutual visits, or through joint committee meetings. Each agency will designate a key person to act as a liaison for this interagency cooperative effort.

ENCLOSURE 1

ARTICLE III -- NASA/JSC CONTRIBUTION

JSC will provide the necessary information on the past accomplishments, current activities, and future plans on the lunar base and planetary exploration programs as related to USACE involvement. In addition, JSC will provide data on lunar and planetary materials as the basis for studies of materials properties by USACE. JSC will provide, as necessary, lunar and planetary environmental data for further USACE and JSC cooperative investigations.

- B. JSC will review proposals for research and development prepared by USACE to evaluate their relevance to current and future space exploration programs.
- C. Extraterrestrial samples maintained at JSC are not committed by this Agreement. Normal JSC procedures will be followed for access to samples, if they are required for USACE research. These procedures include technical reviews of proposed work and specific security plans for safeguarding samples.

ARTICLE IV -- USACE CONTRIBUTION

- A. Based on the input from JSC, USACE will provide technical support for both inhouse and contract research and development related to controlled environmental life support systems including low g and zero g sewer systems and waste disposal; structural concepts and materials; geotechnical considerations, soil mechanics and foundation design; material and earth handling in low g and zero g; site selection including surveying; construction techniques including robotics, power, and power distribution; environmental issues; i.e., effect of facilities on the environment and vice versa including dust control; and buried and air-inflated structures; for lunar construction. The support will consist of consultation in areas of USACE expertise and the performance of detailed research and development tasks, for which proposals are prepared by USACE.
- B. USACE will review proposals presented by JSC for their technical soundness.
- C. USACE will organize, maintain, and lead a construction industry participant group consisting of architects/engineers, consultants, constructors, academics, and research and development organizations with an interest in the USACE areas of expertise.

ARTICLE V -- FUNDING

Nothing in this Agreement shall be construed to imply any commitment of JSC's or USACE's funds or appropriations to each other. In addition, each party's resource commitment to this Agreement is subject to availability of appropriated funds.

ARTICLE VI -- DURATION, MODIFICATION, AND TERMINATION

This Agreement shall become effective upon the last signature hereto, and will remain in effect for three (3) years, or until such time as it is terminated upon 90 day written notice of either party. However, upon mutual written agreement, said Agreement may be terminated at any time.

FOR: DEPARTMENT OF ARMY

Robert B Oswald

ROBERT B. OSWALD
Director, Research and Development
U.S. Army Corps of Engineers

Date

14 Sep 88

FOR: NATIONAL AERONAUTICS AND
SPACE ADMINISTRATION

Aaron Cohen

AARON COHEN
Director,
Lyndon B. Johnson Space Center

Date

10/26/88